

THURSDAY, JUNE 28, 1906.

THE ORGANISATION OF AGRICULTURE.

- (1) *The Transition in Agriculture*. By Edwin A. Pratt. Pp. x+354. (London: John Murray, 1906.) Price 5s.
- (2) *An Introduction to the Study of Agricultural Economics*. By Henry C. Taylor. Pp. viii+327. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1905.) Price 5s.
- (3) *The Development of Agriculture in Denmark*. By R. J. Thompson. A paper read before the Royal Statistical Society, May 15, 1906.

(1) THIS is the work of an author whose previous writings on subjects of agricultural economy have attracted considerable attention. The present volume has a three-fold purpose—to describe recent developments of subsidiary branches of agriculture, the progress of agricultural cooperation, and the principles on which small holdings may have the best chance of success.

Mr. Pratt states that "it is open to consideration whether the bitter cry of the distressed British agriculturist has not been persisted in with undue energy of late years." It is certain, however, that the last period of agricultural depression, which reached its culminating point about 1892, was terribly acute, and the subsequent recovery has been correspondingly slow. That there has been recovery few authorities will deny, and we believe that the general agricultural outlook is more hopeful than it has been for some time. This is certainly the impression we gain from a careful perusal of Mr. Pratt's book; yet at the same time the author scarcely touches upon the main features of British agriculture, and in this respect the title of the work is not altogether justified. Wheat-growing has declined, it is true, to a very marked extent, and a great deal of arable land has been converted into pasture during the last quarter of a century. On the other hand, the decline in the wheat acreage has been somewhat balanced by an increase in the acreage under oats. The increases in the areas of those subsidiary branches of agriculture, as Mr. Pratt calls them, with which his book mainly deals, are relatively unimportant.

The breeding of live-stock, and especially the home and export trade in pure-bred pedigree animals, the fattening of cattle, sheep and pigs, grazing and dairying, all involve operations upon such a large scale, and require individual skill of such a high order, that we cannot conceive of any "transition in agriculture" which would seriously interfere with the size of the holdings, the acreage of the crops, or the capital necessary to maintain them. But if we except agriculture on the large scale as it has been and in all probability will continue to be carried on, we admit that Mr. Pratt has done useful service in bringing under review those important developments of comparatively minor industries which are not only of benefit to agriculture, but are nationally advan-

tageous by helping to create and maintain a sturdy, independent race of Englishmen.

An interesting account is given of the commercial aspects of milk selling. The facts related are not new, though it may well be that they have not attracted much attention outside the districts affected or on the part of persons not immediately concerned. Farmers in the dairying districts have found it pay much better to sell fresh milk than to turn it into butter and cheese. The sale of fresh milk and cream is, in fact, practically our only agricultural monopoly, and it is not likely that foreign competition will seriously threaten it. But whereas formerly the milk producer was an individual unit at the mercy of the urban wholesale dealer or middleman, judicious combination amongst dairy-farmers has enabled them to protect their interests, and especially to secure a uniform and equitable price for the milk produced. In Staffordshire, Derbyshire, Cheshire, Essex, and Somerset, associations have been formed with this object in view, and their success has been remarkable. In one case, Mr. Pratt states, the financial gain thus secured through combination amounts to from 30,000*l.* to 40,000*l.* annually, or an average annual gain per member of from 30*l.* to 40*l.*

The descriptions of fruit-farming and the production of flowers, bulbs, vegetables, poultry, and eggs will repay careful study, and they may well encourage the further extension of similar crops in districts suited to them upon the cooperative principles that have proved successful.

We come finally to the author's views on small holdings. This question is now under consideration by a Departmental Committee of the Board of Agriculture, and it is well known that the new President of the Board, Lord Carrington, is deeply interested in the subject, his own experiments in that direction in Lincolnshire and elsewhere having met with striking success. Mr. Pratt discusses the question as to whether ownership or tenancy is the more expedient form of tenure, and he pronounces unhesitatingly in favour of tenancy. We believe that his conclusions on this subject are sound, and that the example of countries where freehold occupancy has resulted in heavy mortgages with the payment of "rent" in its most odious form should be avoided.

(2) Dr. Henry C. Taylor, the author of the book on "Agricultural Economics," is assistant professor of political economy in the Wisconsin University, and an expert in the Office of Experiment Stations of the United States Department of Agriculture. His work forms part of the "Citizen's Library of Economics, Politics, and Sociology," and is in effect a studious effort to apply to practical agriculture the principles of political economy. As such it should prove useful to young agricultural students in connection with their ordinary course of "political arithmetic." Dr. Taylor himself states that one of the aims of his book is the setting forth of "fundamental economic principles, which, when carefully followed, lead the way to success in agricultural production."

In thirteen chapters the author deals with the

factors of production, the organisation of the farm, the size of farms, the prices of agricultural products, the distribution of wealth, the value of land, the methods of its acquisition, and the relations between landlord and tenant. He uses the term "capital-goods" to represent the live-stock and implements essential to agricultural production, and the word "capital" to represent the money-value of capital-goods. Land, capital-goods, and labour being the three factors of agricultural production, he discusses the economic properties of each. In regard to labour, which includes the work of the farmer himself, he advances some interesting economic propositions, especially as to the "qualitative and quantitative efficiency of farmers"—qualitative efficiency relating to the return a man can obtain from a given piece of land with a given supply of capital-goods, and quantitative efficiency to the quantity of land and capital-goods which a man can operate. He shows that the farmer with the highest degree of qualitative efficiency can make not only more than a living upon land of any grade, but that he can make the largest net profit on the most productive land after out-bidding all competitors for its use. Thus, "owing to the higher rents which the more efficient are willing to pay for the better grades of land, the farmer can secure the largest net profit by employing that grade of land which corresponds to his degree of qualitative efficiency."

In discussing the principles which determine different methods of farming, the author points out that whereas formerly agricultural conditions demanded that farms should produce all that was required by the cultivators, modern conditions of increased population and improved facilities of transport have given rise to what is described as commercial agriculture, the system under which agricultural produce is grown in bulk, and marketed in return for other commodities required but no longer produced by the seller.

In this country we pride ourselves upon the superior yield of our agricultural crops. This is, however, due to a system of intensive cultivation, and Dr. Taylor shows that the extensive system of cultivation as pursued in the United States is that which is at present best suited to the economic conditions of the country. Pressure of population in the older States of the American Union is already causing a more intensive cultivation than that previously followed. "In new countries," Dr. Taylor writes, "where land is relatively abundant, extensive culture is generally most profitable, and the average size of farms is usually greater than in older countries where land is scarce, land values very high, and intensive culture most profitable."

Incidentally, the book contains many statistical details relating to the United States that are not readily accessible to the general reader. For instance, the land area of the United States is given as 1,900,947,200 acres. The area of the United Kingdom is 77,671,319 acres. The percentage of improved land, or, as we describe it, "land under crops and grass," is in the United States about 22, in England

about 76, and in Germany about 60. Again, with regard to the size of farms, in the United States the average is given as 146.6 acres. In England it is about 65 acres (or 85 acres if holdings above one acre and not above five acres be not included); in Germany it is 19.2 acres, and in France 21.4 acres. This variation in the average size of holdings is, of course, significant of the different systems of land tenure, tenant-farming prevailing in England and peasant-proprietorship in France and Germany. In the United States most of the land is either cultivated by its owners or on the sharing principle. According to the census of 1900, the different classes of farmers in the United States are represented in the following proportions:—

Owners	...	...	...	54.9 per cent.
Part Owners	...	...	...	7.9 "
Owners and Tenants	...	...	...	0.9 "
Managers	...	...	...	1.0 "
Cash Tenants	...	...	...	13.1 "
Share Tenants	...	...	...	22.2 "
				100.0

An interesting description is given of the American system of "share-tenancy," which is scarcely, if at all, practised in this country. The principle of it is something akin to *métayage*, as adopted in France, Italy, and Spain. A share-tenant in America pays for the use of the farm a proportion (such as one-third or one-half) of the crops cultivated. The share is delivered to the owner in kind. The owner participates in the management of the farm, and, in fact, directs all the more important operations. Under this system the landlords are usually the older and more experienced men, who own more land than they can well cultivate, whilst the tenants are younger men who prefer share tenancy to fixed rent, because their risk of loss is less.

(3) Denmark is a concrete example of the successful development of "commercial agriculture." Mr. Thompson has made an elaborate statistical study of the agricultural conditions prevailing in Denmark, and his facts and figures are well worthy of careful study on the part of economists. Most authorities agree that the prosperity of Denmark is attributable to three causes—the system of land tenure, education, and cooperation. Thrift, the art of wisely saving and wisely spending, is a national characteristic of the Danes, and this, combined with the admirable organisation of their export trade in dairy produce, has enabled them to attain to a greater relative degree of agricultural prosperity than perhaps any other country. Whilst there may be much to admire and copy in the methods of agricultural organisation pursued in Denmark, it should be remembered that this little country is almost entirely dependent upon its exports to the free and immense markets of Great Britain, and that its system of wholesale grading for despatch to one country could not be applied, without modifications, to Great Britain, which has little or no export trade in dairy produce, and whose local home markets are scattered and unlinked with any central administration.

E. H. G.